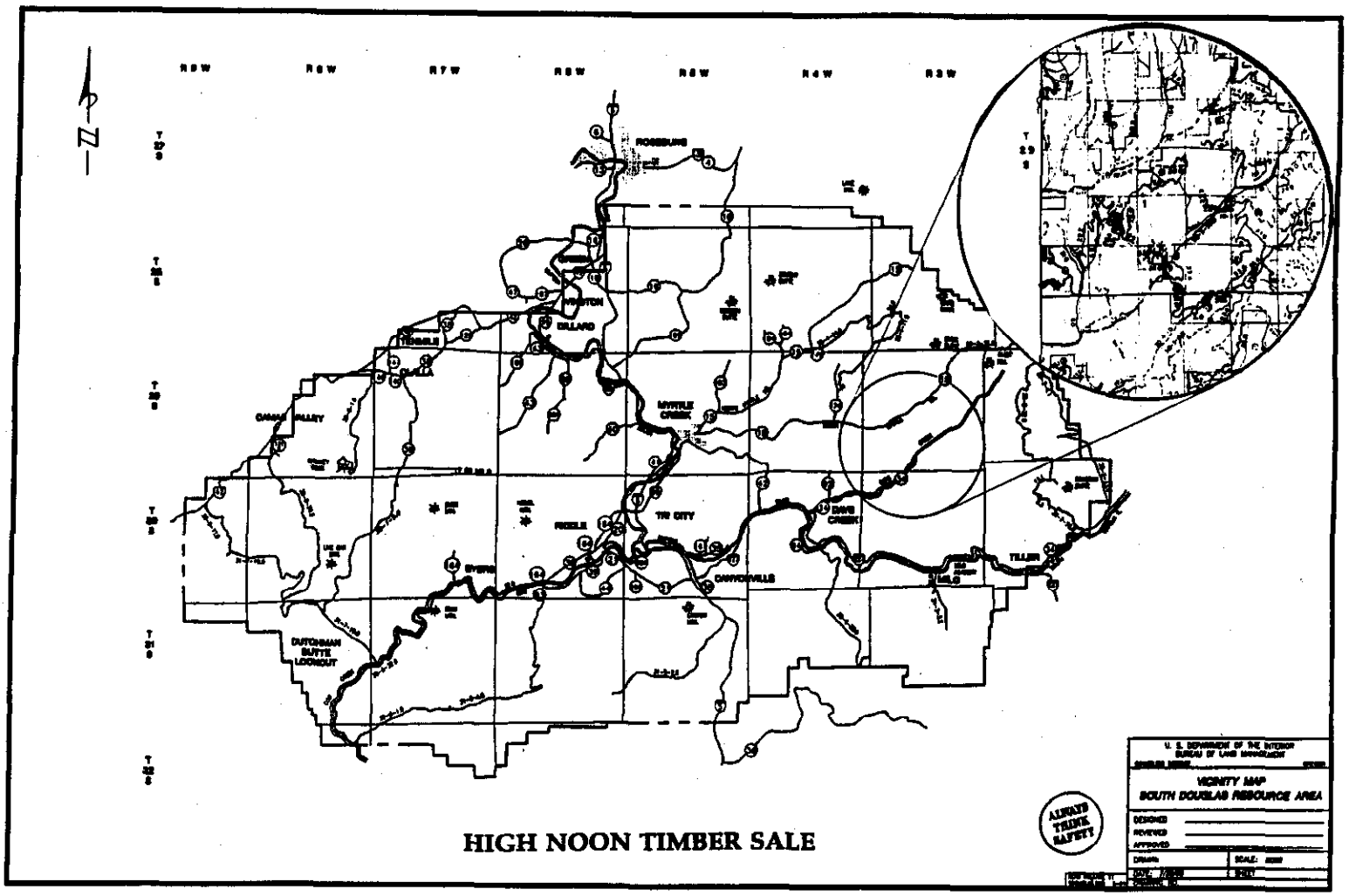
HIGH NOON TIMBER SALE

Environmental Assessment
OR105-95-15

South Douglas Resource Area
Roseburg District BLM

T29S R3W Sections 29, 31 & 33
&
T30S R3W Sections 3 & 4



HIGH NOON TIMBER SALE

October 6, 1995

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Chapter 1
PURPOSE AND NEED FOR ACTION

The South Douglas Resource Area of the Roseburg District of the Bureau of Land Management (BLM), proposes a timber harvest in the Days and St. John Creek Watershed Analysis Units (WAU). The legal description is; T29S R3W Sections 29, 31, & 33 and T30S R3W Sections 3 & 4 (see vicinity map, front cover). The proposed project area is located within Tier 1 Key Watershed in the Matrix land allocation as described in the April 13, 1994, Standards and Guidelines (S & G's) for Management of Habitat for Late-Successional and Old-Growth Forest Related Species Within the Range of the Northern Spotted Owl and Record of Decision (ROD). Sections 3, 4, 31, and 33 are in General Forest Management Area (GFMA) and section 29 is in a Connectivity/Diversity Block (Roseburg District Record of Decision and Resource Management Plan, (ROD/RMP), June 2, 1995, p. 33-34). The S & G's state that most timber harvest and other silviculture activities would be conducted in that portion of the matrix with suitable forest lands, according to the standards and guidelines. Scheduled timber harvest which contributes to the probable sale quantity (PSQ), occurs in the Matrix lands. The purpose of this sale is to meet the PSQ for the resource area. The objectives in Matrix are stated in the ROD/RMP (p. 33).

I. Decisions To Be Made

A. What site specific project design features are necessary to meet ROD/RMP requirements in both GFMA and Connectivity?

B. What existing roads within a reasonable proximity to the proposed sale area can be decommissioned in order to meet the directive to reduce road mileage in Key watersheds?

II. Scoping

In order to involve the public in preparing the sale and meet the requirements of the National Environmental Policy Act (NEPA), notification of the project proposal was made, via mail, to; landowners adjacent to the project area, Douglas Timber Operators, and the Confederated Tribes of Grand Ronde, Confederated Tribes of Siletz Indians, and Cow Creek Band of Umpqua Tribe of Indians.

The US Fish & Wildlife Service will be formally notified via consultation package to be completed prior to the record of decision for this project. The Umpqua basin cutthroat trout (Oncorhynchus clarki) have been "proposed" for listing by the National Marine Fisheries Service (NMFS) as an *endangered* species under the Endangered Species Act of 1973, as amended, and the coastal coho salmon (Oncorhynchus kisutch) have been "proposed" for listing as *threatened*. The National Marine Fisheries Service (NMFS) has been informally contacted. If the cutthroat or coho salmon are listed and the proposed action is selected, it

would be a "may effect" and the action would require consultation with NMFS.

The Old Growth Defense Council, Pacific Rivers Council, Umpqua Watersheds, Oregon Natural Resources Council and the Coast Range Association were notified via mail. This project was also included in the Roseburg BLM Project Planning Update (Summer 1995).

III. Scope of Analysis

The areas proposed for regeneration harvest have been selected following a screening process that looked at minimizing the impact on active northern spotted owl sites and maintaining older forest habitat connectivity. The proposed timber sale is feasible with regards to the requirement to retain 15% of federal lands as late-successional forest (80 years and above). The late-successional forest remaining after harvest would be approximately 53% in the Days Creek watershed, and 42% in the St. John Creek watershed.

The proposed sale area was screened for Survey and Manage-Known Sites and no conflicts were found. There are no rural/urban interface concerns as the private parcels adjacent to the project area are zoned R-20 (20 acre parcels) (PRMP/EIS, Vol. I, p. 3-66).

Areas adjacent to proposed units which cannot feasibly be cable harvested at this time, would be held and considered for another harvest method at a later time.

The Interdisciplinary Team (IDT) analyzed concerns related to resources that had the potential of being affected by the proposed action. All concerns were determined to not be significant issues because they would be mitigated through project design and application of Best Management Practices (BMP's), in the ROD/RMP (Vol. II, Appendix D).

Chapter 2
DISCUSSION OF ALTERNATIVES

I. Process Used to Formulate Alternatives

The IDT developed a proposed action. The action does not involve unresolved conflicts concerning alternative uses of available resources and, therefore, alternatives were not generated. Mitigation has been determined and would be incorporated in implementation of the project. The no action alternative will also be analyzed in this Environmental Assessment (EA).

II. Alternatives Considered but Eliminated from Detailed Analysis

The IDT was concerned about the possibility of not gaining agreement from landowners to decommission roads, in a timely manner. There was concern that if BLM did not get agreement, the necessary amount of road to be decommissioned would not be available in order to meet RMP requirements of reducing existing road mileage within key watersheds.

The IDT began to explore alternatives that would be considered and analyzed. Alternatives included; constructing temporary roads (rather than permanent), helicopter harvesting, and, altering the sale in ways that would require less or no road building by eliminating units, etc. It was determined that such alternatives would not need analysis until a lack of agreement actually occurred, at which time alternatives could then be analyzed by the IDT. As an interim basis, engineering will track road construction and decommissioning on BLM lands in the Tier 1 watershed.

III. **Project Design Features**

The following features would be incorporated in implementation of the proposed action:

A. The project would be designed to meet the Aquatic Conservation Strategy (ACS) objectives, for Riparian Reserves, Matrix (GFMA & Connectivity) as outlined in the Roseburg District Proposed Resource Management Plan/Environmental Impact Statement, October 1994 (PRMP/EIS), Vol. I, Chap. 2.

RIPARIAN RESERVES

1. Non fish-bearing streams that have a definable channel and show evidence of annual scour and deposition will have a Riparian Reserve width of 180 feet on either side of the channel. Fish bearing or potentially fish-bearing streams require Riparian Reserve width of 360 feet on each side.

MATRIX

2. Retain 6 to 8 (GFMA) and 12 to 18 (Connectivity) green trees/acre greater than 20 inches, diameter breast height (DBH), irregularly scattered and/or grouped.

3. Reserve at least 1.2 existing snags per acre (PRMP/EIS, Vol. I, p. 4-43). Where existing snags do not occur or cannot be safely retained, additional green trees would be reserved for snag recruitment.

4. Retain coarse woody debris (minimum of 120 linear feet/acre, greater than or equal to 16 inches (large end) and 16 feet in length (Instruction Memorandum (IM-95-028, 11/94)). When there is insufficient coarse woody debris, one additional green tree would be reserved for future recruitment.

5. If bats are found, the species would be identified and determination would be made as to the reason the site is being used by the bats. As an interim measure, timber harvest would be prohibited within 250' of sites containing bats (S & G's, C-43).

B. Best Management Practices would be required for ground based activities (if used) for site preparation ROD/RMP (Appendix D).

C. Permanent road construction would meet standards and guidelines as stated in the S & G's (p. C-32 & 33) and the BMP's outlined in the ROD/RMP (Appendix D).

D. Temporary spur roads would be decommissioned after harvest, during the same dry season as construction. Decommissioning would include; removing culverts and fill from draws and streams, tilling, revegetating, and blocking.

E. Renovation of the 29-3-33.8, 29-3-31.2, 29-3-33.4, and 30-4-3.0 roads, would be done with application of BMP's, specifically including additional relief culverts and/or waterdips.

F. The existing roads that have been determined as high priority decommissioning opportunities (Table 2), would have erosion control practices implemented in order to reduce sedimentation from the roads. If decommissioning, including tilling, is not possible on all or some of these roads, upgrading through application of BMP's will be implemented to reduce impacts to water quality. (For discussion of *decommission* and *upgrade* see the FEMAT Report, July 1993, Appendix V-J).

G. Where harvest occurs adjacent to wet areas less than one acre, advanced regeneration pockets and their associated leave trees, and Riparian Reserves, timber would be directionally felled away from these protected areas where possible. This would maintain the integrity of these features.

H. Green trees would be retained adjacent to wet areas less than one acre in size to help maintain and protect the integrity of these wet areas.

I. Clump retention trees in and suspend over or yard away from; draws, headwalls, depressions, drainages and unstable areas that do not qualify for Riparian Reserves.

J. Leave trees would be "clumped" around significant (1/2 ac. or larger) advanced regeneration pockets to minimize the need for logging entry or to provide a buffer against the occurrence of falling/yarding induced damage (PRMP/EIS, Vol. II, Appendix L, p. 63).

K. Where safe and feasible, locate retention trees around snags and large madrone.

L. Advanced regeneration pockets and their associated leave trees would be firetrailed out where feasible to avoid damage during broadcast burning.

M. Prescribed fire treatments for site preparation, in order to create planting spots and for initial vegetation control, would be planned and implemented after harvest. Plans would be developed using the IDT approach. The team would include a representative from; soils, silviculture, wildlife and fire. Treatments would be planned in order to minimize; intensive burns, consumption of litter and coarse woody debris, damage to residual live trees, and impacts to air quality (PRMP/EIS, Vol. II, Appendix L, p.63). A combination of handpiling and broadcast burning would be utilized.

N. Regeneration would occur through planting and/or natural seeding. Utilization of planting stock with well developed root systems would enhance survival. Planting stock would include; Douglas-fir, ponderosa pine, sugar pine, incense cedar and

and other competing vegetation. Seedling shading and tubing may be utilized to protect the seedling from heat and moisture loss, and control animal damage. (PRMP/EIS, Vol. II, Appendix L, p. 62 & 64).

O. Douglas-fir would be the primary leave tree species selected. In addition, a natural mix (based on both species occurrence and vigor) of other conifer species (ponderosa pine, sugar pine, grand fir, and incense cedar) and occasional large hardwoods (madrone, chinkapin, California black oak and big leaf maple) would be left. This would assure stand diversity and promote natural regeneration. Diverse species seed sources would help contribute to the natural regeneration success, thereby supplementing artificial regeneration efforts.

P. The contractor would be required to operate in a manner that minimizes pollution. This would include, but is not limited to insuring that all chemicals to be stored on site (including petroleum products); have a Material Safety Data Sheet (MSDS) with them, are in closed containers and secondary containment, and quantities would be kept to a minimum.

Q. Pacific yew would be located and tallied as the sale is cruised. All yew would be reserved in the timber sale contract.

IV. Description of Alternatives

Alternative 1-No Action

Harvest would not occur in this location at this time. Harvest would occur in another location within the Matrix lands in order to meet harvest obligations. Road renovation/construction would not occur. Decommissioning of proposed roads would not occur at this time.

Alternative 2-Proposed Action

This alternative consists of units 1-4 located in 29-3-31, unit 5 in 29-3-29 (Connectivity), units 6, 7 and the north portion of 8 in 29-3-33, the south portion of unit 8 in 30-3-3 and unit 9 in 30-3-4 (Appendix A-1, 2 & 3). Approximately 6.0 million board feet (MMBF) would be cable harvested from 242 acres (including approx. 20 acres of right-of-way timber). Units 7 and 8 would be harvested in the dry season with full suspension where feasible to help protect and maintain soil site productivity and reduce the probability of slope failure. There would be approximately two miles of new road construction, which would be rocked and permanent and one mile of temporary roads (spurs). There would be approximately 12 miles of road renovation (including road decommissioning) for this alternative. The Yellow Starthistle in the vicinity of unit 6 should be avoided during road renovation in order to prevent dispersal of noxious weed seed. No roads would be constructed in Riparian Reserves. Table 1 summarizes the alternative.

Opportunities for roads to decommission or obliterate have been identified (Table 2). Approximately two miles of road within the Days Creek watershed would need to be

decommissioned/obliterated based on this project. Decommissioning is dependent on landowner agreement with BLM recommendations.

The areas of Woodland Milk Vetch in unit 9 would require clumping of retention trees above the populations in order to eliminate disturbance to the plants due to logs rolling, or being yarded through the area. These plants would require protection during site preparation ie. no burning in the vicinity and/or firetrailing around the plants.

Site preparation would occur in order to facilitate successful reforestation. Broadcast burning is not recommended on category 1 soils. Units 1 and 7 are considered category 1 due the presence of granitic soils (unit 1) and slopes dominantly greater than 65% with skeletal soils (unit 7). Units 2 and 3 could be broadcast burned with a short duration, low intensity spring-like burn. Unit 4 and 5 would be handpiled and burned. If these units are burned, they should be monitored to determine if soil productivity standards were met. Units 6, 8 and 9 have no significant soils related restrictions in regards to use of fire for site prep.

Harvest units would be planted within one year of the completion of site preparation. The need for plantation protection, maintenance, and release, would be determined through survival surveys, in order to meet stocking standards.

Table 1
COMPARISON OF ALTERNATIVES

NOTE: All values are approximate.

ACTION			ALT #1	ALT #2
ACRES HARVESTED:				
Days Cr. Watershed:	**Unit #**	**1**	0	18
(29-3-29, 31 & 33 and 30-3-4)		**2**	0	19
		3	0	23
		4	0	14
		5	0	38
		6	0	16
		7	0	20
		8	0	40
St. John Cr. Watershed:	**Unit #**	**9**	0	34
(30-3-3)				
Road Right-of-Way:			0	20
TOTAL			0	**242**
TIMBER VOLUME YIELD (MMBF)			0	6.0
ROAD RENOVATION (Miles) (includes road decommissioning)			0	12
No# OF ROAD STREAM CROSSINGS			0	0

Table 2
ROAD DECOMMISSIONING OPPORTUNITIES

Road Number	Length (miles)	Type of Closure
29-3-31.1A	0.60	Decommission
29-3-31.0A	0.59	Decommission
29-3-29.4A	0.61	Decommission
29-3-33.5B	0.30	Decommission
Spurs in 29-3-33	0.50	Decommission or Obliteration
29-3-29.0 (part) & 29-3-29.1	0.70	Decommission
	Total 3.30	

Chapter 3
EXISTING ENVIRONMENT

This chapter will summarize the existing environment in the project area, prior to project implementation. It will describe the resources site specific to the project area, that may be affected by the alternative.

I. WILDLIFE

About 298 wildlife species (birds, mammals, reptiles, and amphibians) are known to occur or suspected to occur in the Roseburg District. An overview of the potential wildlife species in the area has been addressed in the PRMP/EIS (Vol. 1, p. 3-24 to 40).

A. SPECIAL STATUS SPECIES

Special Status Animals within the Roseburg District consist of seven mammals, seventeen birds, eight amphibians, and four reptiles (RMP/EIS, Vol. I, Table 3-19, p. 3-35).

Of the five species federally listed as threatened or endangered, only the northern spotted owl is known to occur within the project area. The entire project area is beyond the 50-mile inland range for the marbled murrelet.

Three spotted owl sites, Master Site Numbers (MSNO), 1810, 2197 and 2093 are located

within the provincial home range[1] of the proposed harvest units. Units located in 29-3-33 and 30-3-3 & 4, are located within 1.2 miles home range of MSNO 1810. Proposed units located in section 29-3-29 & 33 are within 1.2 miles of MSNO 2193 and 1.3 miles of 2093.

Suitable habitat on BLM lands within 1.2 miles of site center prior to the proposed harvest is 547 acres for MSNO 1810 and 543 acres for MSNO 2197. For MSNO 2093, there are 727 acres within 1.3 miles. All sites are below the 1,182 (Cascade) or 1,336 (Klamath) suitable habitat acre threshold[1] prior to any further harvest. Within 0.7 miles, all three owl sites are below the 500 acre threshold; 300 acres for MSNO 1810, 388 acres for MSNO 2197, and 313 acres for MSNO 2093. Table 4 (p. 13) summarizes habitat status before and after harvest.

Dispersal habitat in the S.W. Quarter of 29-3, is currently at the 60 percent level with 223 acres available. Dispersal habitat in the NW quarter of 30-3 is at the 75 percent level with 225 acres available. The NE quarter of 30-3 is currently at the 63 percent level and has 368 acres available. All quarter townships are currently above the 50 percent level needed to meet the standard for dispersal habitat.

Of the three remaining federally listed species, only the bald eagle and peregrine falcon have potential to occur in the project area. Neither have been observed. Inventories for the bald eagle, by Oregon State University, Bob Anthony (1993-1994), have not identified any sites within the project area. There is no peregrine falcon habitat within 1/4 mile of the project area according to surveys conducted in summer 1995. The project area is beyond the range of the Columbian White-tailed Deer.

No suitable bat roost and hibernacula sites (caves, mines, wooden bridges, or old buildings (S & G's, C-43)) were sighted during field reviews for this analysis.

II. SPECIAL STATUS PLANTS

There are three areas in unit 9 in which Woodland Milk Vetch (Astragalus umbraticus) is found (see map in Botany Survey Report-EA file). There are no other special status plants within the proposed sale area.

III. VEGETATION/TIMBER RESOURCES

Yellow Starthistle (Centaurea solstitialis) was found adjacent to unit 6. This is a Target weed for priority control and has been documented for treatment in fiscal year 1996.

29-3-29 (Connectivity) - Unit 5 is the only unit within this section and has had mortality salvage in the past. Douglas-fir is the predominant overstory species along with a few sugar

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[1]The provincial home ranges define a physiographic area for concluding whether a "may affect" determination would constitute an "incidental take" or not. The home range has a 1.2 mi. and 1.3 mi. radii for the Cascade and Klamath Provinces, respectively. The threshold for the Cascade is 1,182 acres and 1,336 acres for the Klamath. The 0.7 mi. radius and 500 acres of suitable habitat, constitute an additional threshold and guideline for determining "incidental take".

pine, ponderosa pine, incense cedar and grand fir. An occasional fire scar on the overstory provides evidence that portions of the understory developed after a fire. Madrone is present in the lower canopy of the overstory and big leaf maple exists in draws. Incense cedar is abundant in the understory. Other conifers are less abundant. Brush and ground vegetation includes; deerbrush, ocean spray, manzanita, poison oak and grass. This unit contains one ponderosa pine seed tree.

29-3-31 (GFMA) - Units 1-4 are located within this section. Two of these units have been mortality salvaged. Douglas-fir is the predominant overstory species in these units along with significant numbers of sugar pine, ponderosa pine and incense cedar. Some grand fir is also present. Madrone and California black oak are present in the lower canopy of the overstory. Incense cedar, grand fir and a few Pacific yew exist in the understory. Brush and ground vegetation is light to moderate and includes; ocean spray, poison oak, sword fern and beargrass. There are four sugar pine seed trees either within or adjacent to the boundary of unit 1.

29-3-33 & 30-3-3 & 4 (GFMA) - Units 6 and 9 have been mortality salvaged. Unit 8 has had madrone firewood harvested. Douglas-fir is the predominant overstory species along with some incense cedar. There are occasional fire scars on overstory trees. Large madrone and incense cedar comprise the majority of the understory, along with some big leaf maple in the draws. Unit 9 has significant advanced regeneration pockets. Brush and ground vegetation consists of; salal, Oregon grape, manzanita, ocean spray, sword fern and poison oak.

IV. WATER RESOURCES/RIPARIAN/FISH

A. Background

The watershed analysis for these WAU's is the John-Days-Coffee Watershed Analysis (JDCWA, August 1995, South Douglas Resource Area). Within the Days Creek watershed, the project is located within four sub-watersheds; Fate Creek, Green Gulch, Wood Creek and Middle Days. Within the St. John Creek watershed, the proposed project is located within the St. John sub-watershed.

The road density (which includes all federal and private lands in the watershed), construction standards, and condition of existing roads in the area are adding sediment into the watersheds. Natural surfaced roads without vegetation, ditches or waterbars, and inadequate culverts, are contributing to water quality problems. Surfaced roads with inadequate culverts and lack of maintenance are also a concern.

B. Fisheries

1. **Federally Proposed Endangered Species**

   The intermittent stream between units 6 and 7 has been determined to be potentially fish-bearing. There is a high likelihood of cutthroat trout and coho salmon using the lower portion of this stream during the winter and spring months (refer to map in Hydrology/Fisheries Report-EA file).

2. **Other Sensitive Fish Species**

The Umpqua chub (Oregonichthys kalawatseti) is a Federal Candidate 2 (FC 2) species, with the *need for additional information* in order to propose this species for listing as *threatened* or *endangered* under the ESA (ONHP 1993). Chub have not been observed within the boundaries of this watershed, but have been observed in the mainstem of the South Umpqua. The potential exists for these species to utilize the accessible lower gradient tributaries located within this watershed.

C. Watersheds

1. **Days Creek Watershed**

According to a 1988 Department of Environmental Quality (DEQ) assessment, Days Creek was rated as having severe problems with respect to water quality condition, water quality conditions affecting fish, and stream quality affecting aquatic habitat. Sediment loading, absence of large woody debris (LWD), temperature, and water quantity were recognized as limiting factors to aquatic habitat and water quality in Days Creek (see JDCWA and the Hydrology/Fisheries Report-EA file).

There are approximately 202 miles of streams in the Days Creek watershed. The stream density is 5.9 miles per square mile (JDCWA). Road density is 4.12 mi./sq. mi. with a stream crossing density of 1.6/sq. mi.

There are five recorded water rights for irrigation use on Fate Creek and/or Days Creek on private property within approximately one mile downstream of the project area.

Units 1, 2, and 5 are located within the Fate Creek sub-watershed. There are no intermittent or perennial streams within any of these units. There is a perennial stream adjacent to, but outside the boundaries of Unit 5. Surfaced and unsurfaced roads (Table 1) are actively adding sediment into the tributaries and main channel of Fate Creek. In 1994, ODFW rated the aquatic habitat as Poor. BLM also conducted Pfankuch Stream Reach Inventory and Channel Stability Evaluations in May of 1995. Four reaches were surveyed, with two receiving a Fair rating, and the other two receiving a Poor rating.

Unit 3 is located within the Green Gulch sub-watershed. This unit contains an intermittent first order stream. The stream channel is currently in good condition and the streambanks are stable with vegetation on the streambanks contributing to this stability.

Unit 4 is located within the Wood Creek sub-watershed. There are no intermittent or perennial streams within this unit. Wood Creek's aquatic habitat condition is rated as Fair.

Units 6, 7, and 8 are located in the Middle Days sub-watershed. There are no intermittent or perennial streams in units 6 or 7. An old spring development was located in unit 6, but there is currently no domestic water use out of this spring nor

recorded water rights. Unit 8 contains two perennial streams. These streams show active downcutting, influenced by runoff being intercepted from the road above the unit and being concentrated in the ditches and diverted by the culverts. The ditches along the existing road also show downcutting and are delivering sediment directly into the stream channels. Approximately 7 acres of unit 8 is within the transient snow zone (TSZ).

2. **St. John Creek Watershed**

There are approximately 115 miles of streams in the St. John watershed. The stream density is 6.7 miles per square mile (JDCWA). Road density is 4.63 mi./sq. mi. with a stream crossing density of 2.0/sq. mi..

Unit 9 is located in the St. John sub-watershed. There are no intermittent or perennial streams in this unit.

BLM conducted Pfankuch surveys of four reaches of St. John Creek which indicated a Fair rating. There is also sediment input into the streams from the roads adjacent to unit 9. Downcutting in the ditches was observed here, similar to that observed in unit 8. Unit 9 is located in the TSZ.

All of the stream reaches surveyed by BLM and ODFW were outside of any of the planned harvest units. Maps and locations of stream reaches surveyed are available from the South Douglas Resource Area Fisheries Biologist.

V. SOILS

29-3-31 - Units 1-4 are located in Igneous rock, comprised mainly of granite-textured rock ranging in composition from granite to diorite. Slopes are dominantly steep with lesser areas of moderately steep. Soils are usually deep, ranging from medium through fine. Soils are normally well drained with somewhat poorly drained soils occurring in concave areas on slopes less than 45%. Shallow soil movement is present in all four units. A deep seated slope failure exists in unit 3.

29-3-29 - Unit 5 is located in Jurassic Volcanic rock, comprised mainly of andesitic breccias and flow rocks. Slopes are steep to moderately steep. Soils are deep and range in texture from medium through fine. The soils are well drained to somewhat poorly drained. The wet soils are usually found in concave areas and foot slopes. Deep seated slope failure and shallow soil movement exist in this unit.

29-3-33 & 30-3-3 & 4 -Units 6-9 are located within the Dothan-Otter Point Formation, comprised mainly of dark siltstone and graywacke sandstone. Slopes are dominantly steep to very steep with some areas of moderately steep. Soils are deep or moderately deep with scattered areas of shallow soils. Soil textures range from medium through fine. The soils are normally well drained. Wet areas are not common and exist only in small areas in draws, depressions, and breaks in the landscape associated with unstable slopes. Deep seated slope failure exists in three of the four units.

VI. CULTURAL RESOURCES

No known cultural resources exist in the project area.

Chapter 4
ENVIRONMENTAL CONSEQUENCES

This chapter is the scientific and analytic basis for the alternative comparisons.

Alternative 1 - No Action

No regeneration harvest would be conducted. The stands will continue to age with concurrent growth in diameter and height. Stand damage in the form of small natural openings would continue to occur as a result of minor disturbances such as wind, insects and disease. If very little growing space is released through disturbance, vigorous residual trees will soon occupy available space and prevent the establishment of new seedlings. As minor disturbances become increasingly severe, they may create site conditions that are favorable for the regeneration of conifers, hardwoods and brush that will initiate a secondary canopy layer. Depending on available growing space, this new layer may soon become suppressed and remain on the forest floor stratum as advanced regeneration or may grow to become a major component of the overall stand (Oliver 1990). If major disturbance such as fire continues to be excluded, conditions over time could be conducive to a catastrophic fire that will set back the successional process. There would be not anticipated impacts to populations of plant species other than by natural selection. Existing habitat conditions would be maintained for mature or old-growth species.

No permanent or temporary roads would be built. No increase in peak flows above current levels would occur due to timber harvest and road building in the watershed. No road decommissioning or renovation would take place. Soil surface erosion from non-surfaced roads would continue. Slope stability, wetlands and Riparian Reserves would not be affected. Project funding would be needed to bring the existing road system into compliance with the ACS objectives.

Alternative 2 - Proposed Action

I. WILDLIFE

Habitat manipulation is the primary influence which impacts all animal species inhabiting or using the project area. The impacts which could be anticipated from timber harvest activities are discussed in the (PRMP/EIS, p. 4-36 to 47).

A. SPECIAL STATUS SPECIES

The proposed timber sale would result in the harvest of 242 acres of suitable northern spotted owl habitat. Harvest of unit 4 and part of 5 will reduce suitable habitat within 1.2 miles of

MSNO 2197 by an estimated 31 acres and 19 acres within 1.3 miles of MSNO 2093. Within 1.2 miles of MSNO 1810 units 7, 8, and 9 will reduce suitable habitat by 94 acres (Table 3).

Harvest within 0.7 miles of any site center is limited to units 8 and 9 near MSNO 1810 and will reduce suitable habitat by 54 acres.

Suitable habitat is already below the threshold levels established for the Klamath and Cascade provinces, respectively (Table 4). Further reductions of suitable habitat is a "may-affect" action on the northern spotted owl.

Table 3
COMPARISON OF CONSEQUENCES
SUITABLE HABITAT

NOTE: All values are approximate.

ACTION	ALT #1	ALT #2	
SUITABLE HABITAT HARVESTED (Acres)	0		242
SUITABLE HAB. HARVESTED W/IN 1.2 MI.* or 1.3 MI. OF THE THREE OWL SITES (Acres)**	0	MSNO 2197*	31
		MSNO 1810*	94
		MSNO 2093 **	19
SUITABLE HAB. HARVESTED W/IN 0.7 MI. OF MSNO 1810 (Acres)	0		54

Table 4
NORTHERN SPOTTED OWL SUITABLE HABITAT PRIOR TO AND AFTER HARVEST
(Acres)

SITE (MSNO)	*1.2 MI. RADIUS		**1.3 MI. RADIUS		0.7 MI. RADIUS	
	PRIOR	AFTER	PRIOR	AFTER	PRIOR	AFTER
1810	547	453	---	---	300	246
2197	543	512	---	---	388	388
2093	---	---	727	708	313	313

* **Cascade Province**
** **Klamath Province**

Dispersal habitat will be reduced in three quarter townships, (30-3-NE, 30-3-NW and 29-3-SW) but only the NE quarter of township 30-3 will be reduced below the 50 percent threshold.

Impacts for each of the following special status species, as related to the proposed action, have been evaluated and the following determinations made:

May Affect-Not Likely to Adversely Affect	No Affect	Reason
northern spotted owl		w/in. impacts expected in EIS
	marbled murrelet	beyond 50 mi. inland range
	Columbian white-tailed deer	beyond historical range
	bald eagle	feeding habitat limited
	peregrine falcon	nesting habitat lacking

These impacts fall within the range expected, as described with the PRMP/EIS, and as such are not considered significant issues.

II. SPECIAL STATUS PLANTS

There would be no anticipated impacts to populations of Astragalus umbraticus if mitigation is applied to protect the plants in unit 9.

III. VEGETATION/TIMBER RESOURCES

All impacts have been analyzed in the PRMP/EIS, Vol. I, p. 4-33 (Effects on Vegetation) and 4-79 & 80 (Effects on Timber Resources).

IV. WATER RESOURCES/RIPARIAN/FISH

If tilled, decommissioning of roads would allow infiltration through the previously compacted road surface, help restore the natural hydrologic processes, and reduce sedimentation.

The proposed permanent road system in 29-3-31 is primarily ridgetop and there are no stream crossings for any of the roads. Construction of this system should not have direct impact to water quality. The temporary spurs should not cause significant impacts to water quality because they are planned to be used and decommissioned in the same dry season. The decommissioning and/or renovation of the roads in Table 2 could have a beneficial impact, by reducing road density and sedimentation problems within this watershed.

The Riparian Reserves should protect the morphology of the stream channels adjacent to the harvest units, prevent increases in stream temperature, filter sediment, and provide a source of LWD. Placement of retention trees around ephemeral streams and draws would provide protection to these areas.

The proposed timber sale does not directly impact fish-bearing or potentially fish-bearing streams. As stated in the PRMP/EIS (Chapter 4-49), "the Final SEIS concluded that Alternative 9 would result in a strong likelihood of providing sufficient aquatic habitat to support stable, well distributed populations of these races/species/groups". By applying the S & G's and the BMP's for road construction and timber harvest, the ACS objectives should not be compromised by the proposed timber sale. The impacts discussed above for fisheries and water resources have been analyzed in the PRMP/EIS (Vol. I, Chap. 4) and there are no anticipated impacts beyond those already analyzed in the PRMP/EIS.

As mentioned in Chapter 3, units 8 and 9 are in the TSZ. Although removal of the forest canopy in the TSZ can result in increased peak flows from rain-on-snow events, no significant impacts are expected from harvesting in these units because of unit design, layout and location.

V. SOILS

BMP's will be applied to permanent road construction and renovation, and temporary roads would be decommissioned after harvest. Logs would be suspended over or yarded away from draws, headwalls, depressions, drainages and unstable areas that do not qualify for Riparian Reserves. Retention trees would be clumped in those areas. This mitigation would alleviate negative impacts associated with the deep seated slope failure and shallow soil movement present in five of the proposed units. There would be no impacts beyond those already analyzed in the PRMP/EIS.

VI. CULTURAL RESOURCES

No known cultural resources would be affected by this action. Concurrence from State Historic Preservation Office is pending.

Cumulative Impacts of the Proposed Action

The PRMP/EIS (Vol. I, p. 4-7 to 4-100) discusses cumulative impacts of activities implemented collectively throughout the district. These impacts result from past, present, and reasonably foreseeable activities on BLM lands and other lands (other public & private).

Timber harvest of approximately 130 acres is planned in the JDCWAU in 1996. Plus tree cleaning is planned for approximately ten trees in the Days Creek WAU in fall 1995 or spring 1996.

Chapter 5
LIST OF PREPARERS

Name	Title	Resource or Discipline	Signature	Date
Sigrid Barron	Environmental Coordinator	ID Team Leader	Sigrid M Barron	10/12/95
Dave Fehringer	Forester	Silviculture	David Fehringer	10/10/95
Frank Oliver	Wildlife Biologist	Wildlife/T & E Species	Frank Oliver	10/10/95
Rob Hurt	Fisheries Biologist	Fisheries/Riparian	Robert Hurt	10/10/95
Gary Basham	Special Status Plant Coordinator	Special Status Plants	Gary Basham	10/11/95
Dennis Hutchison	Soil Scientist	Soils/Water	D. Hutchison	10/11/95
Isaac Barner	District Archeologist	Cultural Resources	Isaac M Barner	10/12/95
John Royce	Multi-Resource Specialist	Management Representative	John A Royce	10/11/95
Bill Adams	Fire Management Specialist	Fuels Management	William J Adams	10/11/95
Ed Richardson	Civil Engineering Technician	Road Engineering	Ed Richardson	10-10-95
Todd Kuck	Forester	Hydrology	Todd Kuck	10-6-95

Analysis Compiled By: Sigrid M Barron 10/12/95
Sigrid Barron — Date
Environmental Coordinator

Chapter 6
LIST OF AGENCIES AND PERSONS CONSULTED

1. Agencies & Persons Consulted:

Douglas County Watermaster
US Fish and Wildlife Service
Oregon Department of Fish and Wildlife

2. The following agencies, organizations, and individuals will be notified of this action if it is implemented:

Coast Range Association
Division of State Lands
Douglas County Board of Commissioners
National Marine Fisheries Service
Old Growth Defense Council
Oregon Department of Environmental Quality
Oregon Department of Fish and Wildlife
Oregon Department of Forestry
Oregon Land Conservation & Development
Oregon Natural Resources Council
Pacific Rivers Council
US Environmental Protection Agency
US Fish and Wildlife Service
Umpqua Regional Council of Governments
Umpqua Watersheds

A notice of decision would be published in the News Review if the decision is made to implement the project.

LITERATURE CITED

Oliver, Chadwick D. and Larson, Bruce C. 1990. Forest Stand Dynamics.

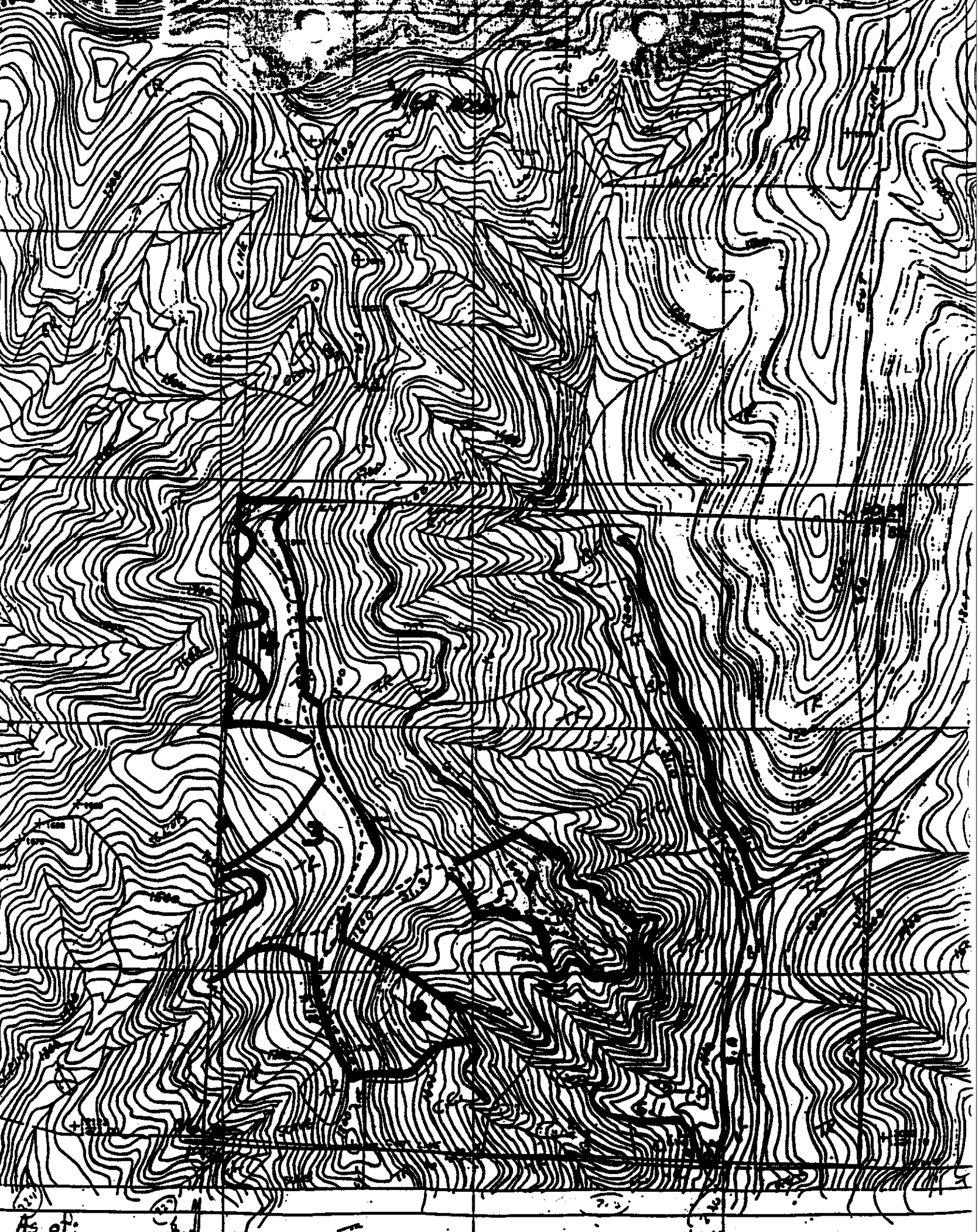
Oregon Department of Environmental Quality. 1988. *1988 Oregon Statewide Assessment of Non-point Sources of Water Pollution.* Prepared by the Oregon State Printing Division. Portland, Oregon.

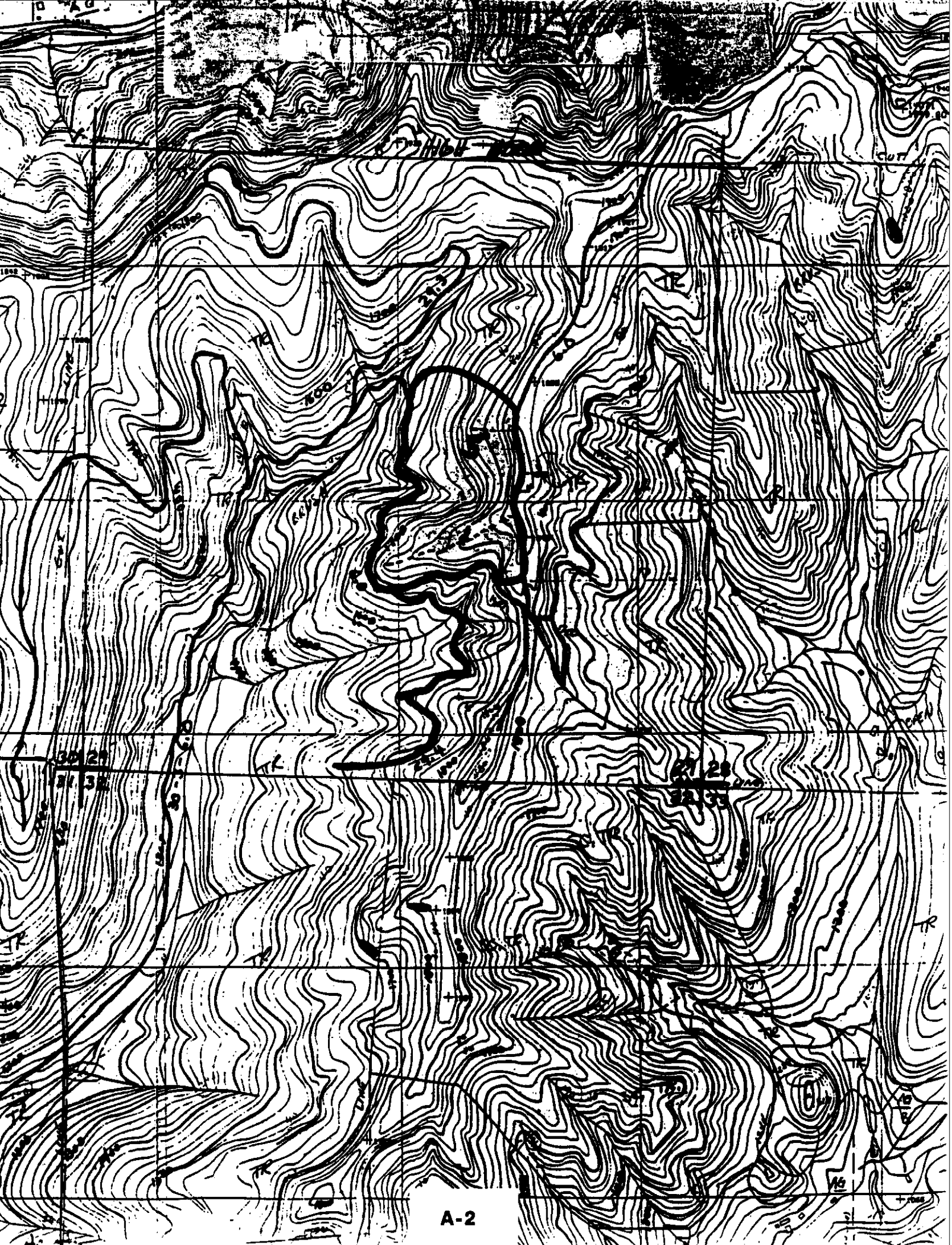
Oregon National Heritage Program (ONHP). 1993. Rare, Threatened and Endangered Plants and Animals of Oregon. Oregon National Heritage Program. Portland, Oregon.

U.S. Department of Agriculture, U.S. Department of the Interior, U.S. Department of Commerce, and the Environmental Protection Agency. July 1993. Forest Ecosystem Management: An Ecological, Economic,and Social Assessment. Report of the Forest Ecosystem Management Assessment Team. Forest Service, Fish and Wildlife Service, National Marine Fisheries Service, National Park Service, Bureau of Land Management, Environmental Protection Agency. (FEMAT Report)

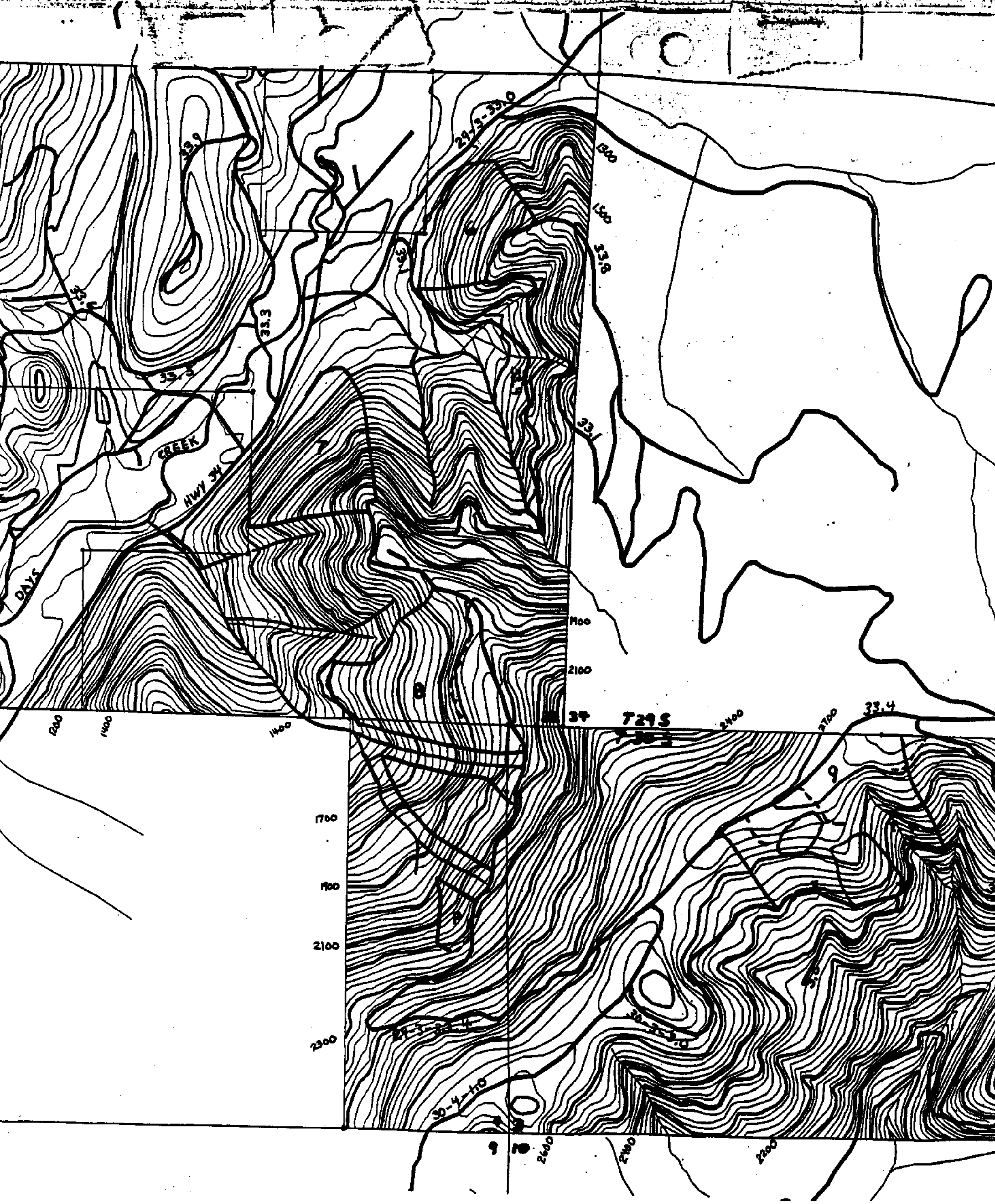
APPENDIX A

MAPS


As of:
7-6-95
T29S R3W. Sec. 31
A-1
= Proposed Road



A-2



of: 8-31-95

- - - - Proposed Road Const.
P, X = Individual Ret. Trees Needed
⬭ = Ret. Area Tags Needed

APPENDIX B

CRITICAL ELEMENTS OF THE HUMAN ENVIRONMENT

The following elements of the human environment are subject to requirements specified in statute, regulation, or executive order.

These resources or values are either **not present** or **would not be affected by the proposed actions or alternative**, unless otherwise described in this EA. This negative declaration is documented below by individuals who assisted in the preparation of this analysis.

ELEMENT	NOT PRESENT	NOT AFFECTED	IN TEXT	INITIALS	TITLE
Air Quality		✓		WJA	William J. Adams FMS
Areas of Critical Environmental Concern	✓			JSB	Resources Forester
Cultural Resources	✓		✓	THB	District Archeologist
Farm Lands (prime or unique)	✓			WCA	SOIL SCIENTIST
Floodplains		✓		TK	FORESTER
Native American Religious Concerns		✓		JSB	Resources Forester
Threatened or Endangered Wildlife Species			✓	TMB RH	WILDLIFE BIO. FISHERIES BIOLOGIST
Threatened or Endangered Plant Species	✓			MB	Special Status Plant Coordinator
Wastes, Hazardous or Solid			✓	SAW	District Hazmat Coord.
Water Quality Drinking/Ground		✓	✓	TK	FORESTER
Wetlands/Riparian Zones		✓	✓	TK	FORESTER
Wild & Scenic Rivers	X			BD	Env. Coord.
Wilderness	X			BD	" "
Visual Resource Management		✓		DAM	Outdoor Recreation Planner